UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,453	06/07/2005	Masakatsu Endo	NGBCP007	9994

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ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/506,453	ENDO ET AL.
	Examiner	**Art Unit**	
	TUAN H. LE	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>10 March 2010</u>.

2a) ☒ This action is **FINAL**.　　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>42-45</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>42-45</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 42-45 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Objections

Claims 42, 45 are objected to because of the following informalities:

Claim 42 line 14, "sleeve manner" should be changed to "slave manner."

Claim 45 line 15, "sleeve manner" should be changed to "slave manner."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tamura (US 6,806,978) in view of Purcell (US 6,718,412).

Regarding **claim 42**, Tamura discloses a print system comprising:

an image source device (camera section 110), (Tamura, fig. 7, fig. 8); and

a print device (print section 150) connected to the image source device through a

USB interface (interface 116, 151), (Tamura, fig. 7, fig. 8), wherein the image source

device includes:

an operation unit operated by a user (operation switch 123), (Tamura, fig. 7, fig.

8, column 32 lines 15-54, wherein the operation switch operates a connected printer);

a request command generation unit (inherent part of switch 123) generating a

request command for requesting to perform a print operation under a print condition

setting desired by the user in response to a print instruction from the operation unit by

the user (Tamura, fig. 7, fig. 8, column 24 lines 56-58, column 32 lines 10-54, column 34

lines 28-31, wherein print command is issued by pressing operation switch 123 and

wherein print condition includes at least two of print resolution of the print section, print

image size, and the number of pixels);

a data storage (EEPROM 119 and/or CF card) storing various resource files

each of which includes an image file required when the print device performs the print

operation under the print condition setting desired by the user (Tamura, column 30 lines

1-5, wherein captured image data is stored); and

a USB device controller (USB I/F section 116) sending the request command to

the print device (Tamura, fig. 8, column 32 lines 15-21, 43-50, wherein print command

from camera 110 is sent to print section 150), and enabling the print device (print

section 150) to independently access a desired resource file stored in the data storage

as controlled in a slave manner by the print device (Tamura, fig. 8, fig. 10, column 31

lines 10-30, column 33 lines 52-60, wherein the printer-camera relation is master-slave

relation and wherein the printer section 150 accesses an image in camera section 110

according to a selected image from the index image),

wherein the print device (printer section 150) includes:

a USB host controller (USB host I/F section 151) receiving the request command

from the image source device (camera 110), (Tamura, fig. 8, column 32 lines 15-21, 43-

50, wherein print command from camera 110 is sent to print section 150), and

independently reading, from the data storage, the desired resource file required for

performing the print operation under the print condition setting by controlling the USB

device controller (Tamura, fig. 8, fig. 10, column 31 lines 10-30, column 33 lines 52-60,

wherein the printer-camera relation is master-slave relation and wherein the printer

section 150 accesses an image in camera section 110 according to a selected image

from the index image); and

a print unit (printer cpu 160) performing the print operation under the requested

print condition setting in response to the received request command (Tamura, fig. 8, fig.

10, column 33 lines 52-60, wherein the selected image is printed).

However, Tamura does not disclose

wherein the USB host controller of the print device periodically sends an

"Interrupt In" command to the USB device controller of the image source device, and

wherein, if the request command is generated when the USB device controller

receives the "Interrupt In" command, the USB device controller returns the request

command to the USB host controller.

On the other hand, Purcell

wherein the USB host controller (controller 100) periodically sends an "Interrupt

In" command to the USB device controller (device 110), (Purcell, fig. 1, fig. 4, column 5

line 50-column 6 line 20, wherein INT-IN signals are periodically sent) and

wherein, when the USB device controller (device 110) receives the "Interrupt In" command, the USB device controller (device controller 110) returns status/data to the USB host controller (controller 100), (Purcell, fig. 1, fig. 4, column 5 line 50-column 6 line 20, wherein the device controller returns data to the host controller upon receiving INT-IN signal).

Therefore, it would have been obvious to a person of ordinary skills in the art to incorporate the usb host controller and the usb device controller as described by Purcell into the system as described by Tamura such that the USB host controller of the print device periodically sends an "Interrupt In" command to the USB device controller of the image source device, and, if the request command is generated when the USB device controller receives the "Interrupt In" command, the USB device controller returns the request command to the USB host controller because such incorporation eliminates the overhead associated with multiple bulk transfers before the requested data is ready to be transmitted to the controller and reduces latency in obtaining responses from the device (Purcell, column 3 lines 22-29).

Regarding **claim 45**, Tamura discloses a print system comprising:

an image source device (camera section 110), (Tamura, fig. 7, fig. 8); and

a print device (print section 150) connected to the image source device through a USB interface (interface 116, 151), (Tamura, fig. 7, fig. 8), wherein the image source device includes:

an operation unit operated by a user (operation switch 123), (Tamura, fig. 7, fig. 8, column 32 lines 15-54, wherein the operation switch operates a connected printer);

a request command generation unit (inherent part of switch 123) generating a

request command for requesting to perform a print operation desired by the user, the

request command including a file name of a resource file of an object for printing and a

predetermined print condition, in response to a print instruction from the operation unit

by the user (Tamura, fig. 7, fig. 8, column 24 lines 56-58, column 32 lines 10-54, column

34 lines 28-31, wherein print command is issued by pressing operation switch 123 and

wherein print condition includes at least two of print resolution of the print section, print

image size, and the number of pixels);

a data storage (EEPROM 119 and/or CF card) storing various resource files

each of which includes an image file required when the print device performs the print

operation under a print condition setting desired by the user (Tamura, column 30 lines

1-5, wherein captured image data is stored and then printed); and

a USB device controller (USB I/F section 116) sending the request command to

the print device through the USB interface (Tamura, fig. 8, column 32 lines 15-21, 43-

50, wherein print command from camera 110 is sent to print section 150), and enabling

the print device (print section 150) to independently access a desired resource file

stored in the data storage as controlled in a slave manner by the print device (Tamura,

fig. 8, fig. 10, column 31 lines 10-30, column 33 lines 52-60, wherein the printer-camera

relation is master-slave relation and wherein the printer section 150 accesses an image

in camera section 110 according to a selected image from the index image),

wherein the print device (printer section 150) includes:

a USB host controller (USB host I/F section 151) receiving the request command

from the image source device (camera 110), (Tamura, fig. 8, column 32 lines 15-21, 43-

50, wherein print command from camera 110 is sent to print section 150), and

the USB host controller (USB host I/F section 151) independently reading the

resource file from the data storage by controlling the USB device controller through the

USB interface (Tamura, fig. 8, fig. 10, column 31 lines 10-30, column 33 lines 52-60,

wherein the printer-camera relation is master-slave relation and wherein the printer

section 150 accesses an image in camera section 110 according to a selected image

from the index image); and

a print unit (printer cpu 160) printing the resource file read by the USB host

controller under the predetermined print condition included in the request command

(Tamura, fig. 8, fig. 10, column 33 lines 52-60, wherein the selected image is printed).

However, Tamura does not disclose

generating a resource file request command for obtaining the resource file having

the file name included in the received request command.

On the other hand, Purcell discloses

generating a request command (INT-IN signal) for obtaining the data included in

the received request command (Purcell, fig. 4, column 6 lines 1-20, wherein INT-IN

requests status and data from device 110).

Therefore, it would have been obvious to a person of ordinary skills in the art to

incorporate a request command as described by Purcell into the system as described

by Tamura so as to generate a resource file request command for obtaining the

resource file having the file name included in the received request command because

such incorporation eliminates the overhead associated with multiple bulk transfers

before the requested data is ready to be transmitted to the controller and reduces

latency in obtaining responses from the device (Purcell, column 3 lines 22-29).

Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tamura (US 6,806,978) in view of Purcell (US 6,718,412) in view of Tanaka

(US 2001/0022624).

Regarding **claim 43**, Tamura and Purcell disclose aforementioned limitations of

the parent claim. Additionally, Tamura discloses

the print condition setting (image size and resolution) is included in one of the

request commands sent from the image source device (camera 110) and the resource

file read by the print device.(Tamura, column 34 lines 10-41, wherein image size and

resolution are sent from camera to printer).

However, Tamura does not disclose

the print condition setting includes a plurality of items including selection of a

desired image file, designation of a desired number of print sheets, designation of a

desired layout, and designation of a desired sheet size.

On the other hand, Tanaka discloses

the print condition setting includes a plurality of items including selection of a

desired image file (selected DSCf0002.jpg), (Tanaka, fig13, fig. 15, fig. 16, paragraph

[0157]), designation of a desired number of print sheets (Tanaka, fig13, fig. 15, fig. 16,

paragraph [0157], wherein 3 prints are desired), designation of a desired layout

(Tanaka, fig13, fig. 15, fig. 16, paragraph [0157], wherein COLOR is chosen), and

designation of a desired sheet size (Tanaka, fig13, fig. 15, fig. 16, paragraph [0157],

wherein A5 is chosen).

Therefore, it would have been obvious to a person of ordinary skills in the art to

incorporate the print condition setting by Tanaka into the system by Tamura and Purcell

such that the print condition setting includes a plurality of items including selection of a

desired image file, designation of a desired number of print sheets, designation of a

desired layout, and designation of a desired sheet size because such incorporation

enhances user interface for a user operating the system.

Regarding **claim 44**, Tamura and Purcell disclose aforementioned limitations of

the parent claim. However, Tamura and Purcell do not disclose

a color display panel; and

a unit displaying, on the color display panel, the print condition setting set by the

user, in response to the print instruction from the operation unit by the user.

On the other hand, Tanaka discloses

a color display panel (LCD 88/238), (Tanaka, fig. 5, fig. 15, fig. 16, paragraph

[0070], wherein the LCD is a color display); and

a unit displaying (inherent part of LCD 88/238), on the color display panel, the

print condition setting set by the user, in response to the print instruction from the

operation unit by the user (Tanaka, fig. 5, fig 13, fig. 15, fig. 16, paragraphs [0070,

0157], wherein print information is displayed for printing an image).

Therefore, it would have been obvious to a person of ordinary skills in the art to incorporate display by Tanaka into the system by Tamura and Purcell such that the print condition setting includes a plurality of items including selection of a desired image file, designation of a desired number of print sheets, designation of a desired layout, and designation of a desired sheet size because such incorporation enhances user interface for a user operating the system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN H. LE whose telephone number is (571)270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan H Le/
Examiner, Art Unit 2622
        /Jason Chan/
        Supervisory Patent Examiner, Art Unit 2622